Docket No.: 334498005US2

Claims 1-48 and 53-79 were pending when the present Office Action was mailed (March 27, 2006). In this response, no claims have been amended or cancelled.

Accordingly, claims 1-48 and 53-79 are currently pending.

In the March 27, 2006 Office Action, claims 1, 2, 4-20, 25, 57 and 58 were rejected

and the rest of the claims were allowed or would be allowable if rewritten in independent

form. More specifically, the status of the application in light of this Office Action is as

follows:

(A) Claims 1, 2, 4-20, 25, 57 and 58 stand rejected under 35 U.S.C. § 102(b) as

being anticipated by U.S. Patent No. 4,696,911 to Boerma ("Boerma");

(B) Claims 3, 21-24, 26 and 27 stand subjected to an objection as being

dependent upon a rejected base claim; and

(C) Claims 28-48, 53-56 and 59-79 are allowed.

A. Response to Section 102(b) Rejection

Claims 1, 2, 4-20, 25, 57 and 58 were rejected under 35 U.S.C. § 102(b) as being

anticipated by Boerma. For the reasons discussed below, this rejection is improper

because Boerma fails to disclose the combination of features of these claims. Accordingly,

the Section 102(b) rejection of claims 1, 2, 4-20, 25, 57 and 58 should be withdrawn.

Claim 1 is directed to a method of hydrogenating an unsaturated feedstock. The

method includes producing a catalyst composition by heating a nickel-based catalyst to a

first temperature of at least about 100°C in the presence of a process gas and a fat

component. The method further includes contacting the unsaturated feedstock with the

catalyst composition and hydrogenating the unsaturated feedstock by sustaining a

-13-

Reply to Office Action of March 27, 2006

hydrogenation reaction at a second temperature of no greater than about 70°C. The feedstock comprises at least one unsaturated organic component.

Docket No.: 334498005US2

Boerma discloses a nickel boride catalyst that can be used to hydrogenate unsaturated organic feedstock (column 1, lines 65-69). The catalyst can be made by reacting alkali borohydride and a nickel salt in a volatile polar solvent, such as ethanol, in a hydrogen or inert gas atmosphere at "a temperature of between 0°C and 80°C, preferably between 20°C and 60°C." (column 2, lines 13-21). The reaction leads to the formation of very finely dispersed nickel boride catalyst. (column 2, lines 23-25). On completion of this reaction, oil is added to the solution, and the solvent is removed by vacuum evaporation at a temperature between 15°C and 60°C (column 2, lines 33-35).

Boerma does not support a Section 102(b) rejection of claim 1 because Boerma fails to disclose several features of claim 1. For example, Boerma does not teach or suggest "producing a catalyst composition by heating a nickel-based catalyst to a first temperature of at least about 100°C." Assuming, for the sake of argument, that the catalyst reaction temperature of Boerma corresponds, at least in part, to the first temperature of claim 1, Boerma does not disclose that the reaction temperature can be at least about 100°C. Instead, the upper limit of Boerma's reaction temperature is 80°C. As a result, Boerma fails to disclose at least one feature of claim 1. Accordingly, claim 1 is patentable over Boerma. Claims 2, 4-20, 25, 57 and 58 are also patentable over Boerma because these claims depend from claim 1, and also because these claims contain additional features. Accordingly, the Section 102(b) rejection of claims 1, 2, 4-20, 25, 57 and 58 should be withdrawn.

In addition, Boerma does not provide any motivation or suggestion to modify its teachings to come up with the combination of elements in claim 1 because Boerma teaches away from having a catalyst reaction temperature of at least about 100°C. According to Boerma, the alkali borohydride and the nickel salt are reacted in a volatile polar solvent at a temperature between 0°C and 80°C, and preferably between 20°C and

Application No. 10/750,457 Amendment dated Reply to Office Action of March 27, 2006

60°C. The volatile polar solvent is removed only after the reaction is completed by vacuum evaporation at a temperature between 15°C and 60°C. Thus, 80°C is the upper limit of Boerma's reaction temperature range for forming the catalyst. Based on the undersigned representative's reading of this reference, Boerma teaches that the polar solvent should be in the liquid phase when the nickel boride catalyst is formed. If the reaction temperature is increased to at least 100°C, it appears that the volatile polar solvent would evaporate very quickly into the vapor phase so as to disrupt the formation of the nickel boride catalyst. As a result, a reaction temperature of at least 100°C may impact Boerma's process. Accordingly, Boerma does not provide any motivation or suggestion to one skilled in the art to perform the method of claim 1.

B. Response to Claim Objection

Claims 3, 21-24, 26 and 27 were subjected to an objection as being dependent upon a rejected base claim. As described above, claim 1 is patentable over Boerma, and claims 3, 21-24, 26 and 27 depend from claim 1. As a result, the objection to these claims should be withdrawn.

C. Allowable Claims

The applicants would like to thank the Examiner for allowing claims 28-48, 53-56 and 59-79. As such, these claims have not been amended in this response.

D. Conclusion

In view of the foregoing, the pending claims comply with 35 U.S.C. § 112 and are patentable over the applied reference. The applicants request reconsideration of the application and respectfully submit that all of the claims are in condition for allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned representative at (206) 359-6038.

Application No. 10/750,457 Amendment dated Reply to Office Action of March 27, 2006 Docket No.: 334498005US2

Respectfully submitted,

Perkins Coje TLP

Chen Liang

Registration No. 51,945

Date: <u>9/26/06</u>

Correspondence Address:

Customer No. 25096 Perkins Coie LLP P.O. Box 1247 Seattle, Washington 98111-1247 (206) 359-8000